IN THE CLAIMS:

1. (previously presented) In a MOSFET transistor with a reactive metal gate electrode, a method for protecting the gate electrode from an underlying gate insulator, the method comprising:

forming a gate insulator overlying a channel region;

forming a first metal barrier overlying the gate insulator, having a thickness of less than 5 nanometers (nm);

forming a second metal gate electrode overlying the first metal barrier with a work function exclusively responsive to the second metal.

2. (previously presented) The method of claim 1 wherein forming a second metal gate electrode includes forming a second metal gate electrode having a thickness of greater than about 10 nm.

3. (original) The method of claim 2 wherein forming a first metal barrier includes forming a first metal barrier having a thickness of greater than 1.5 nm, and less than 5 nm.

4. (original) The method of claim 1 wherein forming a second metal gate electrode includes forming a second metal gate electrode from a material selected from the group of elementary metals including p+ poly, n+ poly, Ta, W, Re, RuO2, Pt, Ti, Hf, Zr, Cu, V, Ir, Ni, Mn, Co, NbO, Pd, Mo, TaSiN, and Nb, and binary metals including WN, TaN, and TiN.

5. (original) The method of claim 1 wherein forming a gate insulator overlying a channel region includes forming a gate insulator from a material selected from the group including SiO2, high-k dielectrics

such as HfO2, ZrO2, Al2O3, La2O3, HfAlOx, and HfAlON, and binary, ternary, and nitrided metal oxides.

6. (original) The method of claim 1 wherein forming a first metal barrier includes forming the first metal barrier from a material selected from the group including binary metals such as TaN, TiN, and WN.

7. (original) The method of claim 6 wherein forming a second metal gate electrode includes forming a second metal gate electrode having a high work function.

8. (original) The method of claim 7 wherein forming a second metal gate electrode with a high work function includes the second metal being selected from the group including elemental metals such as Ir, Pt, Cu, Re, Ni, Mn, Co, RuO2, p+ poly, Pd, Mo, and TaSiN, and binary metals such as TaN, WN, and TiN.

9. (original) The method of claim 6 wherein forming a second metal gate electrode includes forming a second metal gate electrode having a low work function.

10. (original) The method of claim 9 wherein forming a second metal gate electrode with a low work function includes selecting the second metal from the group of materials including elementary metals such as Al, Nb, Hf, Zr, V, Ir, n+ poly, W, Ti, Ta, and NbO, and binary metals such as TaN, TiN, and WN.

11. (original) The method of claim 1 wherein establishing a gate work function exclusively responsive to the second metal includes establishing a threshold voltage (Vth).

12. (original) The method of claim 1 wherein forming a first barrier metal overlying the gate insulator includes the first metal barrier preventing the migration of oxygen from the gate insulator to the second metal gate electrode.

13. (original) The method of claim 1 wherein forming a first barrier metal overlying the gate insulator includes the first metal barrier preventing the migration of B into the gate insulator from a p+ poly gate electrode.

14-26. canceled

27. (previously presented) In a MOSFET transistor with a reactive metal gate electrode, a method for protecting the gate electrode from an underlying gate insulator, the method comprising:

forming a gate insulator overlying a channel region;

forming a first metal barrier overlying the gate insulator;

forming a second metal gate electrode overlying the first metal barrier, selected from the group of materials including elemental metals such as Ir, Pt, Re, Ni, Mn, Co, RuO2, p+ poly, Pd, Mo, and TaSiN, and binary metals such as TaN, WN, and TiN; and,

wherein the gate electrode has a high work function exclusively responsive to the second metal.

28. (previously presented) In a MOSFET transistor with a reactive metal gate electrode, a method for protecting the gate electrode from an underlying gate insulator, the method comprising:

forming a gate insulator overlying a channel region;

forming a first metal barrier overlying the gate insulator;

forming a second metal gate electrode overlying the first metal barrier, selecting the second metal from the group of materials including elementary metals such as Al, Nb, Hf, Zr, V, Ir, n+ poly, W, Ti, Ta, and NbO, and binary metals such as TaN, TiN, and WN; and,

wherein the gate electrode has a low work function exclusively responsive to the second metal.